

the flat state and the curled state of the bi-stable spring substrate, and then adjusts the user interface to optimize it for the new bi-stable spring state.

10. The wearable video device of claim **5**, wherein the electronic module further comprises:

an inertial orientation sensor, wherein when the wearable video device is in a curled state the inertial orientation sensor allows the wearable video device to reorient the user interface towards the user.

11. The wearable video device of claim **10**, wherein when the wearable video device is in the curled state and in a power saving mode the inertial orientation sensor determines when the wearable video device has been oriented into a viewing position and then directs the wearable video device to reactivate the flexible display.

12. The wearable video device of claim **10**, wherein when the wearable video device is in a low power state the inertial orientation sensor determines when the wearable video device has been oriented out of a viewing position and then directs the wearable video device to reduce power consumption.

13. A method for passing information between an accessory device disposed on one surface of a bi-stable spring substrate and a portable electronic device, the accessory device having a flexible display arranged to present a first set of visual information, the portable electronic device having a portable electronic device display arranged to present a second set of visual information, the method comprising:

determining whether the accessory device is being worn by an end-user, the determining accomplished by at least one sensor on the accessory device;

when it is determined the accessory device is being worn by the end user, establishing a communication channel between the accessory device and the portable electronic device, the communication channel arranged to provide a bi-directional communication link between the flexible display and the portable electronic device;

passing information between the portable electronic device and the accessory device by way of the bi-directional communication link, wherein at least a portion of the passed information is presented by the flexible display as the first set of visual information; and

displaying the first set of visual information by the flexible display.

14. The method of claim **13**, wherein the first set of visual information comprises a user interface arranged to receive a user input event, the method further comprising:

receiving an input signal in accordance with the user input event at the portable electronic device; and

transmitting at least a portion of the user input to the portable electronic device over the established communication channel.

15. The method of claim **14**, wherein the method further comprises:

recharging a battery housed within the accessory device by way of a plurality of ambient light energy collectors disposed across a portion of one surface of the accessory device.

16. A slap bracelet configured to display information wirelessly transmitted from a portable electronic device, the slap bracelet comprising:

a communication link, allowing two-way communication between the slap bracelet and the portable electronic device;

a flexible display disposed over a portion of a first surface of the slap bracelet;

a touch sensitive user interface disposed over the top of the flexible display; and

an electronic module disposed on one end of the first surface of the slap bracelet;

wherein information generated on either device can be displayed on either the host device display or the flexible display.

17. The slap bracelet as recited in claim **16**, wherein the electronic module comprises:

a wireless communications antenna;

a battery;

a data storage component;

an integrated circuit for driving the flexible display, and

a kinetic energy gathering component, wherein the battery can be trickle charged by the kinetic energy gathering component.

18. The slap bracelet as recited in claim **16**, wherein power supplied to the slap bracelet is at least partially provided by ambient light energy collectors disposed on at least one edge of the accessory device.

19. A non-transitory computer readable medium for storing computer instructions executed by a processor in a portable electronic device for controlling a flexible accessory device mounted on a bi-stable spring substrate in wireless communication with the portable electronic device, the non-transitory computer readable medium comprising:

computer code for establishing a communication channel between the flexible accessory device and the portable electronic device;

computer code for receiving a user input on a first user interface built into the portable electronic device;

computer code for interpreting the user input with the portable electronic device processor;

computer code for sending display data across the communication channel; and

computer code for displaying the display data on a flexible accessory device display.

20. The non-transitory computer readable medium of claim **19**, wherein the accessory device has a second user interface, the non-transitory computer readable medium further comprising:

computer code for receiving a user input at the second user interface;

computer code for transmitting the user input to the processor portion of the portable electronic device;

computer code for translating the user input from the second user interface into a control signal; and

computer code for adjusting display data located on a portable electronic device display.

21. The non-transitory computer readable medium of claim **20**, wherein the second user interface is comprised of the flexible accessory device display and a touch screen sensor.

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